**Sikagard® 520**
Liquid Applied Vapor Permeable Air Barrier

**Description**
Sikagard 520 Liquid Applied Vapor Permeable Air Barrier is a low VOC, single-component liquid applied, elastomeric membrane designed to provide a vapor permeable air and water barrier when applied to above-grade wall assemblies. It is asphalt-based and cures to a tough monolithic rubber-like membrane that resists air leakage and water penetration when applied to plywood and gypsum sheathing, concrete and concrete masonry units.

**Where to Use**
To be used in conjunction with SikaMultiSeal® 515 Self-Adhered Transition Seam Tape and Sikaflex® 110 Liquid Seam Sealant. Acceptable substrates are above grade exterior wall substrates including precast concrete, cast-in place concrete, concrete block, primed steel, aluminum mill finish, anodized aluminum, galvanized metal, gypsum board and wood.

**Advantages**
- Low odor, low VOC.
- Seamless, elastomeric membrane for above grade wall applications.
- Easy to install, cost effective brush, roller or spray application using common spray equipment.
- Passes ASTM E 2357.
- UV Stable for 6 month exposure.
- Water vapor permeance allows wall assemblies to dry out.
- Excellent adhesion to common construction surfaces.
- Meets industry performance standards to control air movement.

**Coverage**
Apply at a rate of 3.75 gallons per 100 ft² (26.5 feet per gallon) to achieve a uniform wet film thickness of 60 mils.

**Packaging**
5 gallon pails, 55 gallon drums

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**Typical Data (Material and curing conditions @ 74°F (22°C) and 40% R.H.)**

RESULTS MAY DIFFER BASED UPON STATISTICAL VARIATIONS DEPENDING UPON MIXING METHODS AND EQUIPMENT, TEMPERATURE, APPLICATION METHODS, TEST METHODS, ACTUAL SITE CONDITIONS AND CURING CONDITIONS.

- **Self Life:** 1 year.
- **Storage:** Store in original containers. Store at temperatures above 40°F (4°C), do not allow product to freeze.
- **Properties:**
  - Air Permeance ASTM E2178 (SCFM/ ft²): 0.0014
  - 30 mil dry thickness @ ÂP = 0.3 in water
- **ASTM 2357 System Air Leakage:** Pass
- **WVP ASTM E 96B:** 12.6 perms
- **Crack Bridging/Freeze-Thaw: ICC-ES AC212** Pass
- **Water Resistance AATCC 127:** Pass
- **Fastener Sealability D1970:** Pass
- **Dry Time:**
  - Sets to Touch: 4 – 6 hours
  - Recoil: 24 hours
- **Exposure:** 6 months
- **VOC:** g/L < 10
- **Tensile /Elongation:** @ 73°F ASTM D 2370
- **Sag/Flow ASTM D4586:** None @ 240°F
- **Weight per Gallon:** 8.6 lbs
- **Solids by Weight:** 59 % +/- 2%
- **Solids by Volume:** 58% +/- 2%
- **Vehicle Base:** Modified Asphalt
- **Solvent:** Mineral Spirits
- **Clean up:** Mineral Spirits
## How to Use

### Surface Preparation
Surfaces must be sound, clean, dry and free of frost, dirt, dust, loose concrete, grease, oil, contaminants or other foreign matter that may adversely affect the adhesion of the liquid applied vapor permeable air and water barrier membrane. Surfaces should be sound, free of voids, gaps, breaks and spalled areas. New concrete should be cured for a minimum of 7 days before Sikagard 520 Liquid Applied Vapor Permeable Air Barrier is applied. Acceptable substrates are precast concrete, cast-in-place concrete, concrete block, primed steel, aluminum mill finish, anodized aluminum, galvanized metal, gypsum board and wood. Joints between panels of exterior grade gypsum and plywood up to 1/4 inch (6 mm) wide shall be treated with a 1/16 inch (3 mm) deep x 3/4 inch (19 mm) wide cap bead application of Sikaflex 110 Liquid Seam Sealant. Joints between panels of exterior grade gypsum or plywood wider than 1/4 inch shall be sealed with a strip of SikaMultiSeal 515 Self-Adhered Transition Seam Tape aligned over the joint and applied to a substrate primed with Sikagard 510 Transition Seam Tape Primer. Apply sufficient pressure to self-adhered transition seam tape to ensure adhesion to substrate. Strike masonry mortar joints full flush.

Cracks in masonry and concrete up to 1/4 inch (6 mm) wide shall be sealed with a cap bead application of Sikaflex 110 Liquid Seam Sealant. Cracks in masonry and concrete up to 1/8 inch (3 mm) wide may be filled with a trowel application of liquid air barrier membrane and allowed to cure overnight prior to field application of the liquid air barrier membrane to surface. Cracks wider than 1/2 inch should be re-pointed.

Transition joints between two dissimilar materials at beams, columns, window and door frames, etc., should be sealed with a strip of SikaMultiSeal 515 Self-Adhered Transition Seam Tape aligned over the joint and applied to a substrate primed with Sikagard 510 Transition Seam Tape Primer. Apply sufficient pressure to self-adhered transition seam tape to ensure adhesion to substrate. Provide minimum of 2 1/2 inches (63 mm) of bearing on each adjacent surface. Apply Sikaflex 110 Liquid Seam Sealant along terminations of self-adhered transition seam tape to window and door frame openings or provide mechanical attachment. Mechanical fasteners used to secure sheathing boards or penetrate sheathing boards prior to membrane application shall be set flush with sheathing board and fastened into solid backing. Thinning of the liquid membrane is not permitted.

### Mixing
Stir liquid membrane thoroughly prior to application.

### Application
Sikagard 520 Liquid Applied Vapor Permeable Air Barrier may be applied by brush, roller or spray. Application by conventional air assisted spray equipment in a single or dual-coat application is the preferred method. Apply liquid air barrier membrane in continuous, monolithic application pattern to achieve a uniform coating of permeable air and water barrier membrane. Monitor applications to measure wet mil thickness and avoid creating sags or runs. Pretreat inside and outside corners, wall openings and mechanical penetrations with SikaMultiSeal 515 Self-Adhered Transition Seam Tape. Apply liquid air barrier membrane to fully cover transition seam tape applications.

Tie-in to structural beams, columns, floor slabs and intermittent floors, parapet curbs, foundation walls, roofing systems and at the interface of dissimilar materials with SikaMultiSeal 515 Self-Adhered Transition Seam Tape and or approved flashing membrane.

Mark areas off and ensure that the appropriate volume has been applied over each area. During spraying, the product should be applied in horizontal strokes, then vertical strokes in a cross-hatch method to ensure even application.

Protect wall areas covered with Sikagard 520 Liquid Applied Vapor Permeable Air Barrier from damage due to construction activities, high wind conditions, and extended exposure to inclement weather. Review condition of Sikagard 520 Liquid Applied Vapor Permeable Air Barrier prior to installation of cladding. Repair or remove and replace damaged sections with new membrane. Recommend to cap and protect exposed back-up walls against wet weather conditions during and after application of membrane, including wall openings and construction activity above completed water-resistive vapor permeable air barrier installations.
**Limitations**

Apply at temperatures over 40°F (4°C). Contact between Sikagard 520 Liquid Applied Vapor Permeable Air Barrier Membrane with Sarnafil Roofing Systems is strictly prohibited. Do not apply when rain is forecast within the next 12 hours. Limit exposure to no greater than 6 months.

**Caution**

**CAUTION: IRRITANT.** Contains Asphalt (CAS: 8052-42-4). May cause eye/skin/respiratory irritation. May cause gastrointestinal disturbance if swallowed.

**WARNING.** This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

**First Aid**

Eyes – Hold eyelids apart and flush thoroughly with water for 15 minutes. Skin – Remove contaminated clothing. Wash skin thoroughly for 15 minutes with soap and water. Inhalation – Remove to fresh air. Ingestion – Do not induce vomiting. Dilute with water. Contact physician. In all cases contact a physician immediately if symptoms persist.

**Handling and Storage**

Avoid direct contact. Wear personal protective equipment (chemical resistant goggles/gloves/clothing) to prevent direct contact with skin and eyes. Use only in well ventilated areas. Open doors and windows during use. Use a properly fitted NIOSH respirator if ventilation is poor. Wash thoroughly with soap and water after use. Remove contaminated clothing and launder before reuse.

**Cleanup**

Use personal protective equipment (chemical resistant gloves/goggles/clothing). Without direct contact, sweep up spilled or excess product and place in suitable sealed container. Dispose of excess product and container in accordance with applicable local, state, and federal regulations.